

Elections may be a catalyst for deforestation, new research suggests

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A growing demand for sugarcane has led to rapid deforestation in Bolivia. An estimated 2000 hectares of Bolivian rainforest was cleared in preparation for the expansion of the San Buenaventura Sugar Mill, seen in this photo. Credit: Planet Labs

Democratic elections may be a catalyst for deforestation, according to new research. A study that examined deforestation rates during election years found that competitive elections are associated with higher rates of deforestation. The reason? Politicians are trading trees for votes, according to the researchers.

In the new study, researchers examined satellite images of [forest cover](#) and data on the national elections of every country in the world between 1970 and 2005. They found that rates of forest cover loss are substantially higher during election years, especially when the outcome of the election is uncertain.

The study, which was presented last month at the 2017 American Geophysical Union Fall Meeting in New Orleans, suggests politicians often grant their constituents access to forested lands in exchange for electoral support. The results provide evidence that democratization doesn't always improve conservation, according to the researchers.

Protecting forested lands provides local communities with many long-term benefits including flood protection, carbon sequestration, and job creation. Their destruction however, only provides one short-term benefit: the acquisition of commercially valuable resources, according to the study author.

"I think that in a lot of situations, politicians might prefer long-term diffuse benefits because they make everybody better off," said Luke Sanford, a political science researcher at the University of California San Diego who presented the new research. "But when somebody is faced with a short-term challenge, they might prefer these targeted short-term benefits."



An aerial view of the rainforest just outside Manaus, the capital of the Brazilian state of Amazonas. Large swaths of this forest have been converted into grazing land for cattle. Credit: Neil Palmer, International Center for Tropical Agriculture

Sanford found that election years are associated with 50 percent higher rates of [deforestation](#) than non-election years, especially in countries that have unstable governments and nationally owned rainforests, like Brazil and Kenya. "In Kenya, there's been over 50 percent forest cover lost since 1990 and the majority of that happened during the election years," Sanford said.

The study suggests the amount of deforestation that occurs during an election year often depends on how competitive the election is. Sanford found that close elections are associated with higher rates of

deforestation. Targeting key constituencies is more important when elections are competitive, he said. In Kenya, for example, votes are aggregated at the county level. Kenya's densely populated northern counties often determine the outcome of the country's [national elections](#). As a result, most of the forested land allocated for commercial use in Kenya is located within these counties.

"If you want to win an [election](#) in Kenya, you really want to win this northern district," Sanford said. "One way you might be able to do that is by giving land to people there who don't have land."

When a country transitions from being an autocracy to a democracy, the rate of forest cover loss increases, according to Sanford's preliminary results. In an autocracy, such as a dictatorship or monarchy, the number of people who can remove a leader from power is very small. "When the autocrat wants to pay those people off to stay in power, giving them some rural forested land isn't really useful," Sanford said.

But when a country switches to a democracy, smallholder farmers who had no say in the government now have a strong say in the government, he said. "As a result, if a politician wants to remain in power they have to start paying attention to what those people want, and a lot of those people want some land."

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